

UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

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SERIAL NUMBER FILING DATE	FIRST NAMED A	PLICANT		ATTORNEY DOCKET NO	
08/719,507 04/03/8	FE RELIFFEN		iM		
MARTIN G. REIFFIN		7		EXAMINER	
- 9262 ROYAL PALM BLV - GARDEN GROVE, CA - 9	/D., / ABSS	' [L.E.E. v T		
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COMMISSIONER OF PATENTS AND TRADEMARKS

		<u>.</u>					
T	his a	oplication has been examined Responsive to communication filed on $\frac{11/28/86}{}$	This action is made final.				
		d statutory period for response to this action is set to expire month(s), days from the respond within the period for response will cause the application to become abandoned. 35 U.S.C. 13					
Part I L 3. 5.	X	THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION: Notice of References Cited by Examiner, PTO-892. Notice of Art Cited by Applicant, PTO-1449 Information on How to Effect Drawing Changes, PTO-1474 Company of the Patent Drawing Changes, PTO-1474 Company of the Patent Drawing Changes, PTO-1474	PTO-948. Application, Form PTO-152				
Part I	ı	SUMMARY OF ACTION					
1.	X	Claims	are pending in the application.				
		Of the above, claims	are withdrawn from consideration.				
2.	X	Claims	have been cancelled.				
. 3.		Claims	are allowed.				
4.	X)	Claims 26 to 50	are rejected.				
5.		Claims	are objected to.				
6.		Claims are subject to restriction or election requirement.					
7.		This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.					
8.		Allowable subject matter having been indicated, formal drawings are required in response to this Office action.					
9.		The corrected or substitute drawings have been received on These drawings are acceptable; not acceptable (see explanation).					
10.		The proposed drawing correction and/or the proposed additional or substitute sheet(s) of drawings, filed on has (have) been approved by the examiner. disapproved by the examiner (see explanation).					
11.		The proposed drawing correction, filed, has been approved disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.					
12.		Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has been received not been received					
		been filed in parent application, serial no; filed on;					
13.	13. Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.						
14.		Other					

- Claims 26-50 are presented for examination.
- 2. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

3. Claims 26-50 are rejected under 35 U.S.C. 103 as being unpatentable over Reiffin and Norton.

The subject application is a C-I-P of patent application 06/425,612. As pointed out in page 14 of paper no. 6, filed on 12/9/1985, all the independent claims include a type-ahead buffer memory which is not in the parent application thereby rendering all the claims of the subject application to have the effective filing date of April 3, 1985, the filing date of the subject application. Reiffin, applicant of the subject application, published a paper titled "A real-Time Computer System" in Microcomputer, July, 1983 which is more than one year before the filing date. 12/9/85 of the

subject application. The abovesaid publication has essentially the same content as the parent application. The publication, thus, becomes a 35 U.S.C. 103 reference. Reading Bates combination Co. v. Baker Energy, 223 USPQ 1173 (CAFC 1984).

- 4. Reiffin discloses the invention substantially the same as claimed. comprising a computer which normally has control of the system for compiling entered source, an interrupt means responding to an input means to pass the control of the system from the compiler to an editor, an editor for entering source code into the system . and a means for retrieving the control of the system to the compiler after the entering of the source code.
- Reiffin does not disclose a compiler system 5. which includes a type-ahead buffer in temporary storing data inputted from the keyboard. Norton discloses a compiler system which includes a type-ahead buffer in temporary the data inputted from the keyboard. page 187). It would have been obvious to one of ordinary skill in the art to incorporate the teaching of Norton into Reiffin system because, As the claimed invention. Reiffin describes a real-time compiler which "can be inplemented on any micro using a microprocessor with interrupt capability" (see page 52 paragraph 3 of the publication) and Norton teaches a micro using a microprocessor with interrupt capability whereby the disclosed type-ahead buffer capability could improve the versability of Reiffin's system.

Claims 26-30, 32-36, 38-41, 43-45 are rejected under 35 U.S.C. 103 as being unpatentable over Lawrence et al and Norton.

Lawrence et al was cited as the prior art reference in the last office action and its relevant teachings is incorporated by references as set forth in the last office action.

- Lawrence et al discloses the invention substantially the same as claimed. comprising a central processing unit (microprocessor 26), a keyboard with a plurality of keys (KB1), a memory for storing the entered code (text stream buffer 36), a compiler (interpreter/formatter), and an editor 10. During the formatting operation, an interpreter/formatter normally has the control of the system. Upon the activation of a keystroke, the interpreter/formatter is interrupted and the control of the system is passed to the editor. After the editor has completed the entry of the code byte, the system control is returned to the interpreter/formatter. see Fig. 5, col. 11 lines 51-56, col. 12 lines 50-53, col. 14 lines 13-17 and lines 26-30.
- 7. Lawrence et al do not teach a computer system which includes a type-ahead buffer. Norton teaches a compiler system which includes a type ahead buffer (see page 187). It would have been obvious to one of ordinary skill in the art to incorporate the teachings of Norton into Lawrence et al because, as the claimed

invention, Lawrence et al teach a general purpose computer system which exchanges control between the interpreter/formatter and an editor and Norton teaches another general purpose computer with a type-ahead buffer whereby the disclosed type-ahead buffer could be incorporated into Lawrence et al system thereby increasing its versability.

- 8. Applicant's arguments with respect to claims 26-30, 32-36, 38-41, 43-45 have been considered but are deemed to be most in view of the new grounds of rejection.
- 9. In the remarks, applicant and Mr. Mark Wadsworth raised a plurality of points. Each of the points will be discussed more fully hereinafter.
- 10. First of all, applicant raised the question in regarding of the sufficiency of the disclosure of the cited reference, Lawrence et al. Lawrence et al is cited for its "disclosed" teachings. Therefore, as far as the prosecution of the subject application concerned, it is immaterial whether the disclosure of Lawrence et al meets the requirement of the 35 U.S.C. 112 first paragraph so as long as the teaching relied upon by the examiner is adequately disclosed therein.
- 11. Secondly, Mr. Mark Wadsworth, discussed in length the function of the "disclosed" compiler (emphasis added). More particularly, Mr Wadsworth pointed out that the disclosed compiler performs a plurality of functions including, inter alia scanning

the source code to find the "tokens" and determining the grammar thereof. It is noted that none of the aforesaid functions is positively recited in any of the rejected claims. Specifically, to the extent of the breadth and scope of the recited limitation, a compiler for compiling source code is merely the <u>label</u> of a program for performing a <u>function</u> on the source code for there is no functional limitation succinctly relating the claimed compiler to any of its <u>actual</u> functions discussed hereinabove.

The interpreter/formatter disclosed by

Lawrence et al is a program which performs a function in

the source code. It is the examiner's position that it

would have been a matter of design choice to label the

program and its function differently.

"(t)he specification will not, during examination before the PTO, be inputted to the claims in order to avoid prior art; such limitations must be specially stated in the claims". In re Queener, 230 USPQ 440 (CAFC 1986). In re Lumberg, 113 USPQ 530, 534 (CCPA 1957).

12. Thirdly, Mr. Wadsworth asserted that "(t)he interpreter/formatter does not normally have control of the system. Inserted, the segmenter 5 or text editor normally controls the system." The examiner respectively traverses Mr. Wadsworth's assertion.

Specifically, during non-formatting operation it is corrected that the formatter does not normally control

the system. However, in the formatting process, it would have been obvious to one of ordinary skill in the art that the interpreter/formatter normally has the control of the system. "The interpreter/formatter 6 begins formatting at a given starting row and continues to build one row at a time until the end of the screen", col. 11 lines 44-46. "If a key is depressed during formatting, when the interpreter is terminated at the end of the current row and control is passed back to the keystroke processor 9", col. 11 lines 51-54. The teachings together clearly teach that, in the formatting process, the interpreter/formatter normally has control of the system unless it is interrupted.

Mr Wadsworth also asserted that ""(t)he 13. keyboard input does not interrupt the interpreter/formatter to transfer control of the system to the editor. Only after the interpreter/formatter computer the current row is the control transferred to the keystroke processor 9 of the editor". Mr. Wadsworth also quoted the teaching of col. 11 line 51-54 (see the quotation hereinabove) to support his assertion. examiner respectively and vehemently traverses the assertion. As discussed hereinabove, the interpreter/formatter normally performs its operation until the end of the screen, not the end of the row, see col. 11 lines 44-46. Under this circumstance, how can the interpreter/formatter transfer the control of the system to the editor at the end of the row? It would